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Reply to Office Action of April 15, 2005

Docket No.: 2964-0102P

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present

application.

**Listing of Claims:** 

1. (Currently Amended) A method for the characterisation of physical and/or chemical

properties of a liquid, characterised in that, said method comprising:

1) measuring at least one dependent physical and/or chemical property of a liquid is

measured in a measuring cell as a function of temperature and a component concentration as

independent variables,

2) determining by calculation the values for the component concentration in the

measuring cell are determined by calculation, based on data from a control program for the

change of component concentration and determining in a computer and the temperatures are

determined by calculation from a temperature control program or by measurements;

3) changing the value of the component concentration in the measuring cell is changed by

adding in one step or gradually a predetermined amount of another liquid containing a different

component concentration into the measuring cell according to the a component concentration

control program, for the change of the component concentration, and performing a representative

number of measurements of the dependent physical or chemical property are performed in the

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measuring cell within the a whole selected temperature range within the predetermined change of

the component concentration,

4) repeating the procedures above are repeated at desired component concentrations and

temperatures in order to obtain a wanted number of values;

5) the values obtained for the dependent properties are combined with the values for the

independent properties to measuring points and stored electronically in a computer; and

6) coordinating and visualizing the measuring points electronically stored measuring

points in the computer are co-ordinated and visualised in a three-dimensional diagram.

2. (Currently Amended) A The method according to Claim 1, characterised in that,

wherein a series of measurements are done under rising temperature, and the following series of

measurements are done under decreasing temperatures, and vice versa.

3. (Currently Amended) A The method according to Claim 1, characterised in that,

wherein according to the component concentration control program for the change of the

component concentration one portion of the liquid is removed from the measuring cell and the

same volume of the another liquid containing a different concentration of the component is

thereafter added to the measuring cell.

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4. (Currently Amended) A The method according to Claim 1, characterised in that,

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wherein the changes in concentration and/or the temperature are controlled by a program in the

computer.

5. (Currently Amended) A The method according to Claim 1, characterised in that,

wherein the temperature of each measuring point is measured simultaneously wit with the

physical and/or chemical property.

6. (Currently Amended) A The method according to Claim 1, characterised in that,

wherein the predetermined amount of the another liquid added to the liquid amends the

concentration of the component in the liquid with 0.01-5 % by weight.

7. (Currently Amended) A device for the characterisation of the physical and/or

chemical properties of a liquid, characterised in that, it wherein said device comprises:

a) a measuring cell (1) provided with

i) an equipment (2) for the homogenisation of a liquid,

ii) at least two control equipment (3, 17), which comprise or are attached to

control programs for changing of the two independent variables, component

concentration and temperature, in a predetermined manner, the control equipment (3) of

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the component concentration comprising a dosage organ for the addition of another liquid containing a different component concentration to the measuring cell,

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iii) at least one measuring organ (9, 13, 14) for the determination of at least one dependent physical and/or chemical property of the liquid, and

iv) optionally a measuring organ (15) for the determination of the temperature, b) at least one computer (5) for

i) the reception and storage of data relating to the dependent and independent variables via at least one electronic circuit (11', 12', 13', 14', 15') and the calculation of at least the component concentration from data obtained from the control program and

ii) compilation of the received and calculated values into three-dimensional measuring points, and

c) equipment (16) for visualisation of the measuring points stored in the computer in a three-dimensional diagram.

8. (Currently Amended) A The device according to Claim 7, characterised in that, wherein the equipment for the control of the temperature of the fluid comprises a jacket (17) or a heating coil for the cooling and/or heating by means of a heat transfer medium, whereby cooling and heating is controlled by a program in the computer (5).

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9. (Currently Amended) A The device according to Claim 8, characterised in that

wherein the equipment (3) for the control of component concentration has one or several dosing

organs for the withdrawal from and injection to the measuring cell of the same amount of the

fluids but with different concentrations, whereby amounts are controlled by a program in the

computer (5).

10. (Currently Amended) A The device according to Claim 7, wherein distinguished by

the fact that control programs are included in the computer (5).

11. (New) The method according to Claim 1, wherein a series of measurements are done

under decreasing temperature, and the following series of measurements are done under rising

temperatures.